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09/457,999	12/10/1999	UWE HUEBLER	P99.2413	8312

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SCHIFF, HARDIN & WAITE
PATENT DEPARTMENT
7100 SEARS TOWER
CHICAGO, IL 60606-6473

EXAMINER
CHARLES, DEBRA F

ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/457,999	HUEBLER ET AL.	
	Examin r	Art Unit	
	Debra F. Charles	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claims 1-27 have been examined.

DETAILED ACTION
Response to Amendment

(1) Status of Claims

Claims 1 and 8 have been amended. Claims 1-27 remain pending.
The applicant's response to the examiner's Office Action of January 31, 2002 is moot in light of new grounds for rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6, 8-9,11-19 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cordery et al. (US 4903788) in view of Fathauer et al. (US 3979055).

As per claims 1 and 8 (Amended), Cordery et al. disclose a method for controlling a dynamic scale for processing mixed postal items having respectively different formats, said dynamic scale having a motor-driven conveyor for moving a postal item, in a dynamic operating mode, in succession with continuous movement through an entry region of the scale, a weighing pan, and a discharge region of the scale, said method comprising the steps of(Cordery et al., Abstract, Col. 2, lines 45-67, Col. 3, lines 1-15):

in said dynamic operating mode, supplying a piece of mail to said entry region of the scale at a predetermined regulated conveying speed which is independent of the format of the piece of mail, and conveying said piece of mail through said entry region of the scale to said weighing pan(Cordery et al., Col. 1, lines 10-55, Col. 2, lines 45-67);

deactivating regulation of the conveying speed during a measuring time range while said postal item(Cordery et al., Col. 6, lines 60-67) is conveyed through said weighing pan and obtaining a weight measurement of said postal item, thereby allowing said weight measurement to be obtained with said postal item moving at a speed other than said predetermined regulated conveying speed; and

after said measuring time span, re-activating regulation of the conveying

speed and moving said postal item at said predetermined regulated conveying speed from said weighing pan through said discharge region of said scale(Cordery et al., Abstract, Col. 1, lines 10-55, Col. 2, lines 45-67, Col. 6, lines 60-67, Col. 8, lines 1-20, Col. 9, lines 1-40).

And Cordery et al. further disclose a dynamic scale comprising:
a conveyor arrangement for conveying postal items having a conveyor belt driven by a motor;

a scale housing(Cordery et al., Col. 2, lines 45-50) having an entry region for postal items and a discharge region for postal items;

a weighing pan connected to a weighing cell, said weighing pan being disposed between said entry region and said discharge region and said conveyor arrangement, in a dynamic operating mode, conveying a postal item with continuous movement in succession through said entry region, said weighing pan and said discharge region(Cordery et al., Col. 1, lines 10-55, Col. 2, lines 45-67, Col. 6, lines 12-60, Col. 8, lines 1-20); and

a controller which operates said motor to move said belt at a predetermined, regulated conveying speed when a postal item enters said entry region(Cordery et al., Col. 1, lines 10-55, Col. 2, lines 45-67, Col. 6, lines 12-60, Col. 8, lines 1-20)said controller deactivating regulation of said conveying speed while said postal item is moving through said weighing pan during a measuring time span during which a weight measurement of said postal item is made, allowing said weight measurement to be made with said postal item moving at a speed other than said predetermined, regulated conveying speed, and,

after said measuring time span, said controller re-activating regulation of said conveying speed to move said postal item on said belt through said discharge region(Cordery et al., Col. 1, lines 10-55, Col. 2, lines 45-67, Col. 6, lines 12-60, Col. 8, lines 1-20).

Cordery et al. fail to disclose dynamic operating mode, continuous movement, allowing weight measurement to be obtained with said postal item moving at a speed other than said predetermined regulated conveying speed predetermined regulated conveying speed.

Fathauer et al. disclose dynamic operating mode, continuous movement, allowing weight measurement to be obtained with said postal item moving at a speed other than said predetermined regulated conveying speed predetermined regulated conveying speed (Fathauer et al., Abstract, Col. 1 and 4, Lines 5-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Cordery et al. to use dynamic operating mode, continuous movement, allowing weight measurement to be obtained with said postal item moving at a speed other than said predetermined regulated conveying speed predetermined regulated conveying speed as taught by Fathauer et al. to ensure accurate weighing on the fly while the item is in motion.

As per claim 2, Cordery et al. further disclose a said dynamic operating mode, the steps of:
maintaining said conveying speed at said predetermined, regulating conveying speed before a beginning of said measuring time span(Cordery et al., Col. 1, lines 10-55,Col. 6, lines 60-67, Col. 8, lines 1-20);
sensing when said postal item is located in said entry region of the scale; and upon sensing that said postal item has exited said entry region of the scale, supplying unregulated voltage pulses to the motor driving said conveyor during said measuring time span(Cordery et al., Col. 9, lines 1-40) to operate said conveyor with a predetermined power without regulation of said conveying speed, and tensioning said conveyor to reduce said conveying speed of said postal item during said measuring time span dependent on a weight of said postal item(Cordery et al., Col. 3, lines 1-15, Col. 6, lines 60-67, Col. 8, lines 1-20).

As per claim 3, Cordery et al. further disclose a method wherein said dynamic scale is used with a further processing station having a further processing station conveying speed, and regulating said conveying speed in said dynamic scale dependent on said further processing station conveying speed to produce an output of postal items from said dynamic scale which is approximately 66% of an output of postal items from said further processing station(Cordery et al., Abstract, Col. 1, lines 10-55, Col. 2, lines 45-67, Col. 6, lines 10-60).

As per claim 4, Cordery et al. further disclose a method comprising the steps of:
evaluating said weight measurement of said postal item in said dynamic operating mode; and
dependent on the evaluation of said weight measurement, directly transporting said postal item through said discharge region of said scale or switching into a further operating mode and statically weighing(Cordery et al., Col. 9, lines 1-40) said postal item on said weighing pan in said further operating mode (Cordery et al., Abstract, Col. 2, lines 45-67, Col. 6, lines 10-60).

As per claim 5, Cordery et al. further disclose a method comprising the steps, in said further operating mode, of:
reversing a conveying direction of said conveyor for statically weighing said postal item; and

subsequently again reversing the conveying speed of said conveyor after statically weighing said postal item to convey said postal item through said discharge region of said scale (Cordery et al., Col. 1, lines 10-55).

As per claim 6, Cordery et al. further disclose a method comprising, in said further operating mode, conveying said postal item at a constant conveying speed through said discharge region of said scale (Cordery et al., Col. 1, lines 10-55).

As per claim 9, Cordery et al. further disclose a dynamic scale wherein said weighing pan has a center of gravity, and wherein said weighing pan is mechanically connected to said weighing cell substantially at said center of gravity(Cordery et al., Col. 6, lines 1-10).

As per claim 11, Cordery et al. further disclose a dynamic scale wherein said motor has a switchable direction of operation for moving said conveyor belt in a forward conveying direction and in a reverse conveying direction (Cordery et al., Col. 3, lines 20-50), and further comprising a driver connected between said controller and said motor for switching said motor, dependent on a signal from said controller, to selectively move said conveyor belt in one of said first conveying direction and said second conveying direction(Cordery et al., Col. 6, lines 12-60, Col. 9, lines 1-40).

As per claim 12, Cordery et al. further disclose a dynamic scale wherein said motor comprises a DC motor operated with a voltage having a polarity, and wherein said driver switches said polarity of said voltage to switch said motor to move said conveyor belt in said reverse conveying direction(Cordery et al., Col. 3, lines 1-15, 39-42).

As per claim 13, Cordery et al. further disclose a dynamic scale comprising a switchable transmission, and wherein said controller switches said transmission to operate said motor to move said conveyor belt in said reverse conveying direction(Cordery et al., Col. 3, lines 1-15, 39-42, Col. 6, lines 12-60).

As per claim 14, Cordery et al. further disclose a dynamic scale comprising a support mechanism for said conveyor belt comprising two carrier plates and a supporting plate disposed between said two carrier plates, each of said carrying plates being connected to said weighing pan, and a tensioning arrangement for setting a tension of said conveyor belt, said tensioning arrangement being mounted to said carrier plates, and said conveyor belt being substantially non-elastic at least in a direction corresponding to a conveying direction of said postal item(Cordery et al., Col. 2, lines 45-67, Col. 3, lines 50-67).

As per claim 15, Cordery et al. further disclose a dynamic scale wherein said tensioning arrangement comprises at least one adjustable tension spring for setting said tension(Cordery et al., Col. 2, lines 45-67, Col. 3, lines 50-67, Col. 10, lines 25-40).

As per claim 16, Cordery et al. further disclose a dynamic scale wherein said tensioning arrangement comprises a tensioning roller around which said conveyor belt is entrained, said tensioning roller being mounted on a tensioning shaft, said tensioning shaft having opposite ends each receiving a guide pin, respective helical springs wound around each guide pin, two stop plates respectively attached to said carrier plates, each guide pin having a nut screwed thereon and said stop plate being disposed between said nut and said tensioning shaft with each helical spring being compressed between one of said nuts and one of said stop plates, each helical spring being compressively pre-stressed(Cordery et al., Col. 2, lines 45-67, Col. 4, lines 1-38, Col. 10, lines 25-40).

As per claim 17, Cordery et al. further disclose a dynamic scale wherein said guide pins are respectively received in said tensioning shaft so as not to rotate within said tensioning shaft, and further comprising, for each guide pin, a securing ring which prevents the guide pin from sliding out of said tensioning shaft(Cordery et al., Col. 2, lines 45-67, Col. 3, lines 50-67).

As per claim 18, Cordery et al. further disclose a dynamic scale wherein each of said carrier plates has an oblong hole therein, the respective oblong holes receiving said tensioning shaft and allowing said tensioning shaft to glide therein when said conveyor belt is tensioned by said tensioning roller(Cordery et al., Col. 2, lines 45-67, Col. 3, lines 50-67, Col. 4, lines 1-38).

As per claim 19, Cordery et al. further disclose a dynamic scale comprising a drive roller entrained by said conveyor belt and driven by said motor, said drive roller comprising a sandblasted aluminum pinion(Cordery et al., Col. 2, lines 60-66, Col. 3, lines 10-20) and said conveyor belt being comprised of a low-stretch fabric having a glide coating facing said drive roller and allowing a predetermining slippage between said drive roller and said conveyor belt dependent on a belt tension of said conveyor belt(Cordery et al., Col. 3, lines 1-15, 39-42, Col. 4, lines 1-38).

As per claim 20, Cordery et al. disclose claim 19. Cordery et al., fail to disclose a dynamic scale wherein said glide coating is comprised of plastic.
Official notice is taken that a glide coating composed of plastic is a well-known type of glide coating in the mailing equipment art. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement Cordery et al.'s apparatus with plastic glide coating because this is cheaper than some metal materials and serves the same purpose.

As per claim 21, Cordery et al. further disclose a dynamic scale wherein said housing has a lower guide wall having a width substantially equal to a width of said conveyor belt and having a length which is less than a length of a conveying path for postal items formed by said conveyor belt(Cordery et al., Abstract, Col. 2, lines 45-65, Col. 8, lines 1-20).

As per claim 22, Cordery et al. further disclose a dynamic scale wherein said weighing pan has a back wall for guiding a postal item, said conveyor belt forming a base of said weighing pan at an angle relative to said back wall(Cordery et al., Abstract, Col. 2, lines 45-65, Col. 5, lines 59-67, Col. 8, lines 1-20).

As per claim 23, Cordery et al. further disclose a dynamic scale as claimed in claim 8 wherein said weighing pan is mechanically connected to said weighing cell substantially at a center of gravity of a combination of said weighing pan and a postal item, having highest permitted dimensions, when said postal item having highest permitted dimensions is disposed centrally on said weighing pan(Cordery et al., Col. 6, lines 1-10).

As per claim 24, Cordery et al. further disclose a dynamic scale wherein said weighing pan is comprised of flexurally and torsionally stiff lightweight material and has a back wall comprising a central force transfer element to said weighing cell(Cordery et al., Col. 3, lines 15-20).

As per claim 25, Cordery et al. further disclose a dynamic scale as claimed in claim 24 wherein said back wall of said weighing pan is comprised of a one-piece sandwich structure (Col. 8, lines 1-20).

As per claim 26, Cordery et al. further disclose a dynamic scale comprising a speed sensor mechanically connected to said motor and supplying a signal to said controller identifying a speed of said motor for use by said controller in regulating said conveying speed(Cordery et al., Col. 1, lines 10-55, Col. 3, lines 1-15, 39-42, Col. 6, lines 12-60).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordery et al. and Fathauer et al. as applied to claim 1 above and in view of Thiel (US 6035291).

As per claim 7, Cordery et al. and Fathauer et al. disclose claim 1. Cordery et al. further disclose a method comprising the steps of:
evaluating said weight measurement of said postal item and identifying if said weight measurement is likely to be imprecise; and if said weight measurement is likely to be imprecise, switching into a further operating mode and conveying said postal item directly through said discharge region of said scale and assigning a weight value to said postal item in place of said weight measurement(Thiel, Col. 31, lines 35-50, Col. 32, lines 1-20), said weight value being higher than said weight measurement which is likely to be imprecise(Cordery et al., Col. 9, lines 1-40).

Cordery et al. and Fathauer et al. fail to disclose assigning a weight value to said postal item in place of said weight measurement(Thiel, Col. 31, lines 35-50, Col. 32, lines 1-20).

Thiel discloses assigning a weight value to said postal item in place of said weight measurement(Thiel, Col. 31, lines 35-50, Col. 32, lines 1-20).
It would have been obvious to one of ordinary skill in the art the time of the applicant's invention to modify the method of Cordery et al. and Fathauer et al., and include assigning a weight value to said postal item in place of said weight measurement based on the teachings of Thiel. Thiel provides the motivation by indicating the weight of, for example, a letter is calculated by the postage meter machine on the basis of the standard (average) weight of a letter page that is stored in the postage meter machine. The letter weight is determined from the
weight of a page and from the number of pages. Even though letter and a page weight or a page count are specifically discussed herein, the inventive concept can clearly apply as well to packages and standard (average) package insert weights and package insert counts.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordery et al. and Fathauer et al. as applied to claim 8 above and in view of Yankloski (US 5,538234).

As per claim 10, Cordery et al. and Fathauer et al. disclose claim 8. Cordery et al. disclose a dynamic scale wherein said housing(Cordery et al., Col. 2, lines 45-50) has a guide wall(Yankloski, Col. 3, lines 10-20) disposed below said conveyor belt, and wherein said housing comprises a support mechanism for supporting said conveyor belt above and close to said lower guide wall, and wherein said lower guide wall (Cordery et al., Abstract, Col. 2, lines 45-67, Col. 8, lines 1-20).in said discharge region comprises an adapter for transferring a postal item from said discharge region to a downstream apparatus(Yankloski, Abstract).

Cordery et al. and Fathauer et al. fail to disclose guide wall and transferring a postal item from said discharge region to a downstream apparatus.
Yankloski discloses and transferring a postal item from said discharge region to a downstream apparatus(Yankloski, Abstract, Col. 3, lines 10-20).

It would have been obvious to one of ordinary skill in the art the time of the applicant's invention to modify the apparatus of Cordery et al. and Fathauer et al., and include a guide wall and transferring a postal item from said discharge region to a downstream apparatus based on the teachings of Yankloski. Yankloski provides the motivation by indicating an automatic mailing machine includes a mail transport device for moving individual pieces of mail, which can be of varying shapes and sizes, from a mail bundle to an oppositely disposed apparatus for weighing such pieces of mail and to then move same to a further station for additional processing.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordery et al. and Fathauer et al. as applied to claim 26 above and in view of Yankloski (US 5,538234).

As per claim 27, Cordery et al. and Fathauer et al. disclose claim 26. Cordery et al. further disclose a dynamic scale wherein said speed sensor (Cordery et al., Col. 1, lines 10-55) comprises an encoder(Yankloski, Col. 5, lines 40-67 and Col. 6, lines 1-15). Cordery et al. fail to disclose an encoder.
Yankloski discloses an encoder (Yankloski, Col. 5, lines 40-67 and Col. 6, lines 1-15). It would have been obvious to one of ordinary skill in the art the time of the applicant's invention to modify the apparatus of Cordery et al. and Fathauer et al. and include an encoder based on the teachings of Yankloski. Yankloski provides the motivation by indicating the bar code print head is coupled electronically to the letter transport wheel by an appropriate shaft encoder such that the resolution of the bar code imprinted on the letter is dependent upon the speed at which the letter is moved along its path.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra F. Charles whose telephone number is (703) 305-4718. The examiner can normally be reached on 9-5 Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Debra F. Charles
Examiner
Art Unit 3629

dfc
May 30, 2002

John G. Weiss
Supervisory Patent Examiner